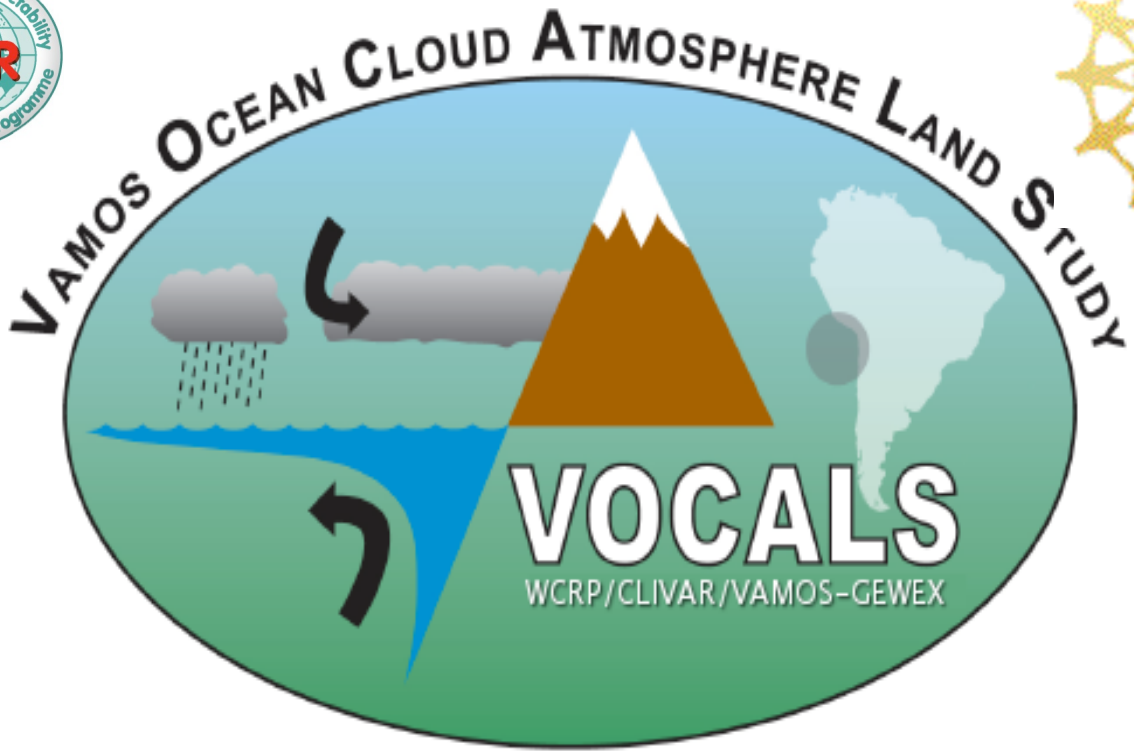
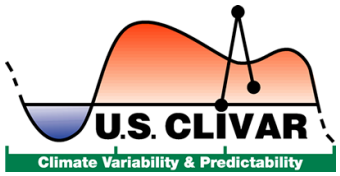


Welcome to VOCALS
First Modeling Workshop
NCAR, May 18-29, 2007



VOCALS will develop and promote scientific activities leading to improved understanding, simulation and prediction of the Southeast Pacific (SEP)

coupled ocean-atmosphere-land system on diurnal to inter-annual timescales

VOCALS is one of the principal components of WCRP/CLIVAR VAMOS*, and has links with the GEWEX GCSS group.

* VAMOS Variability of the American MOnsoon Systems http://www.eol.ucar.edu/projects/vamos/

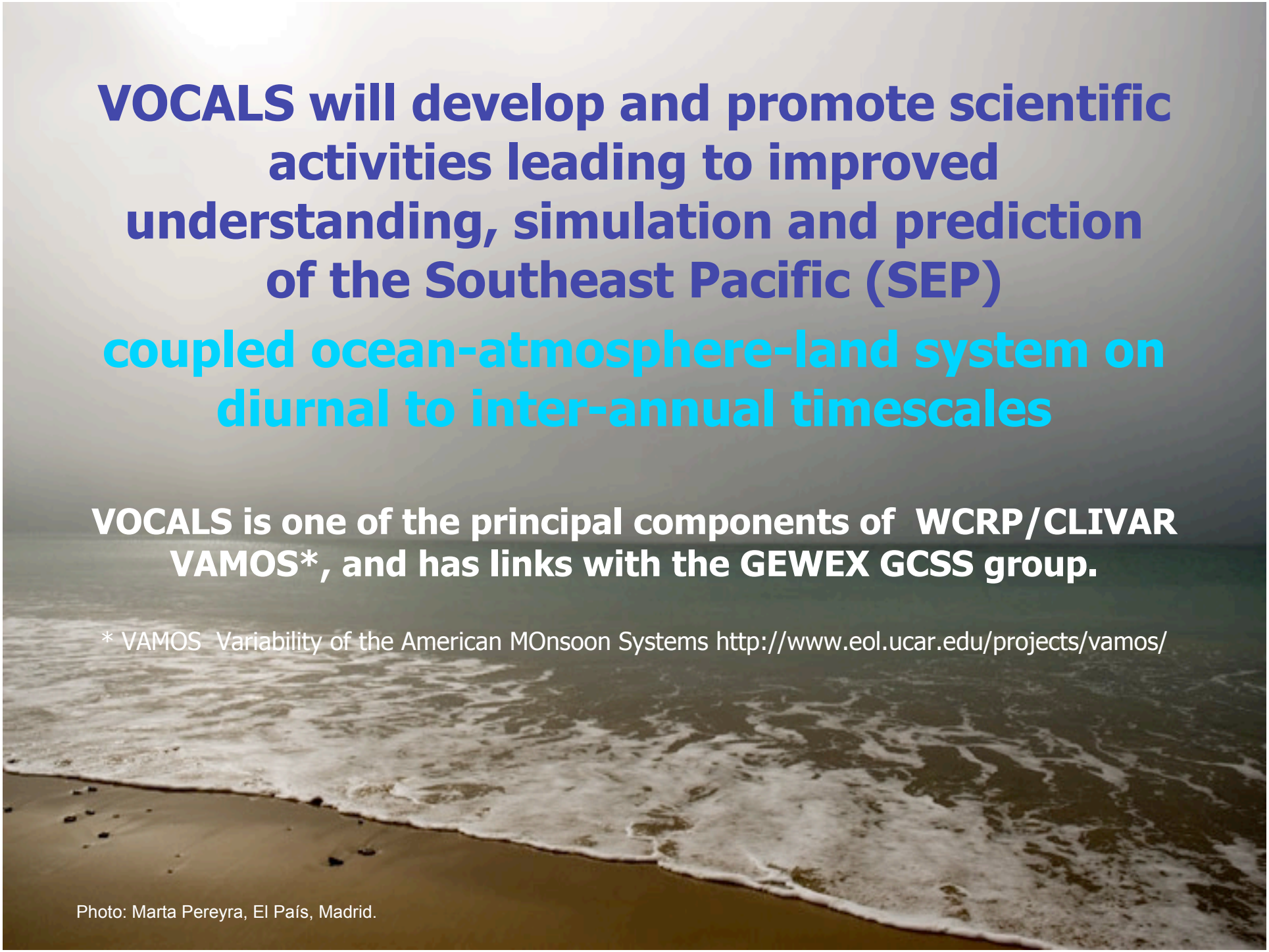
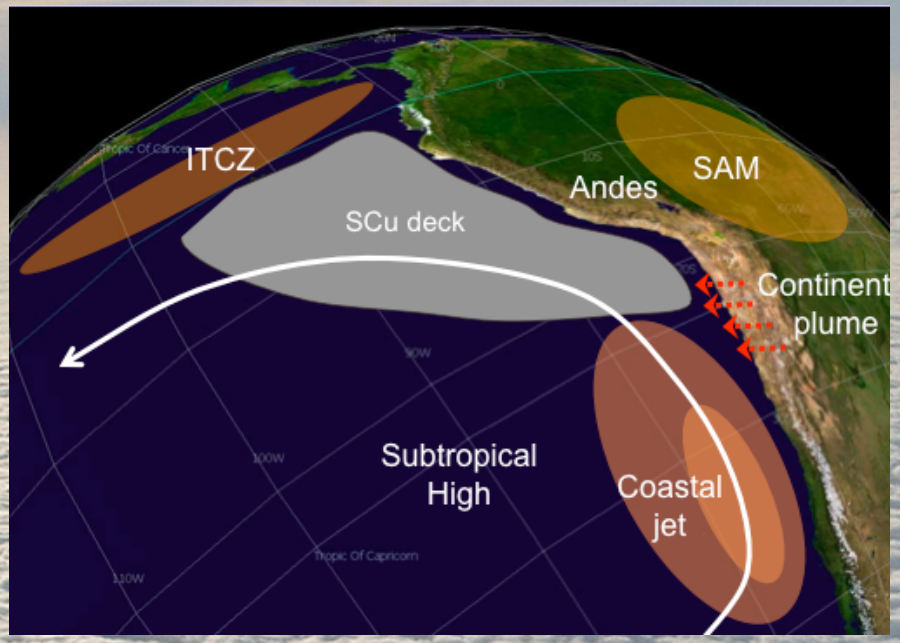


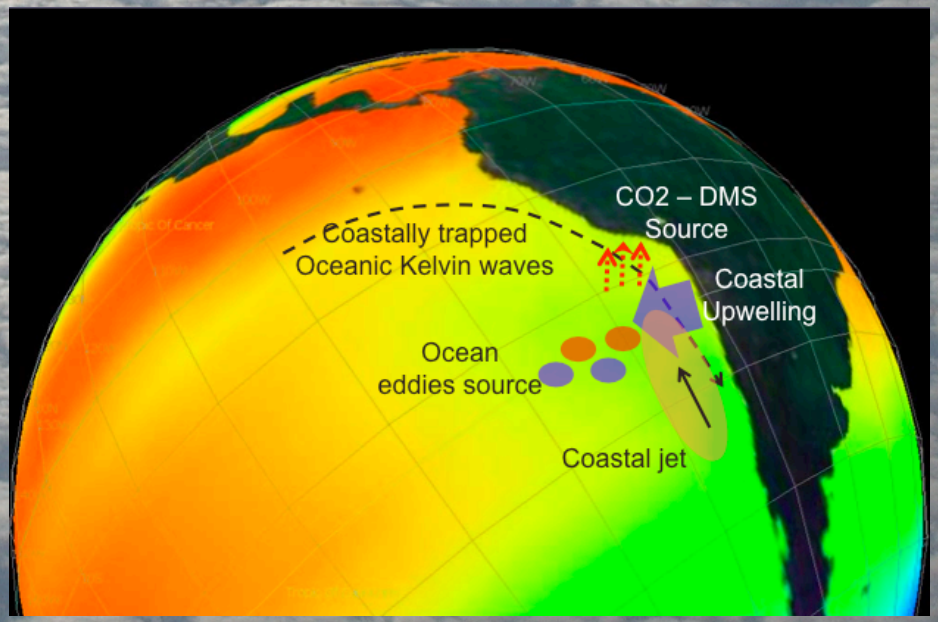
Photo: Marta Pereyra, El País, Madrid.

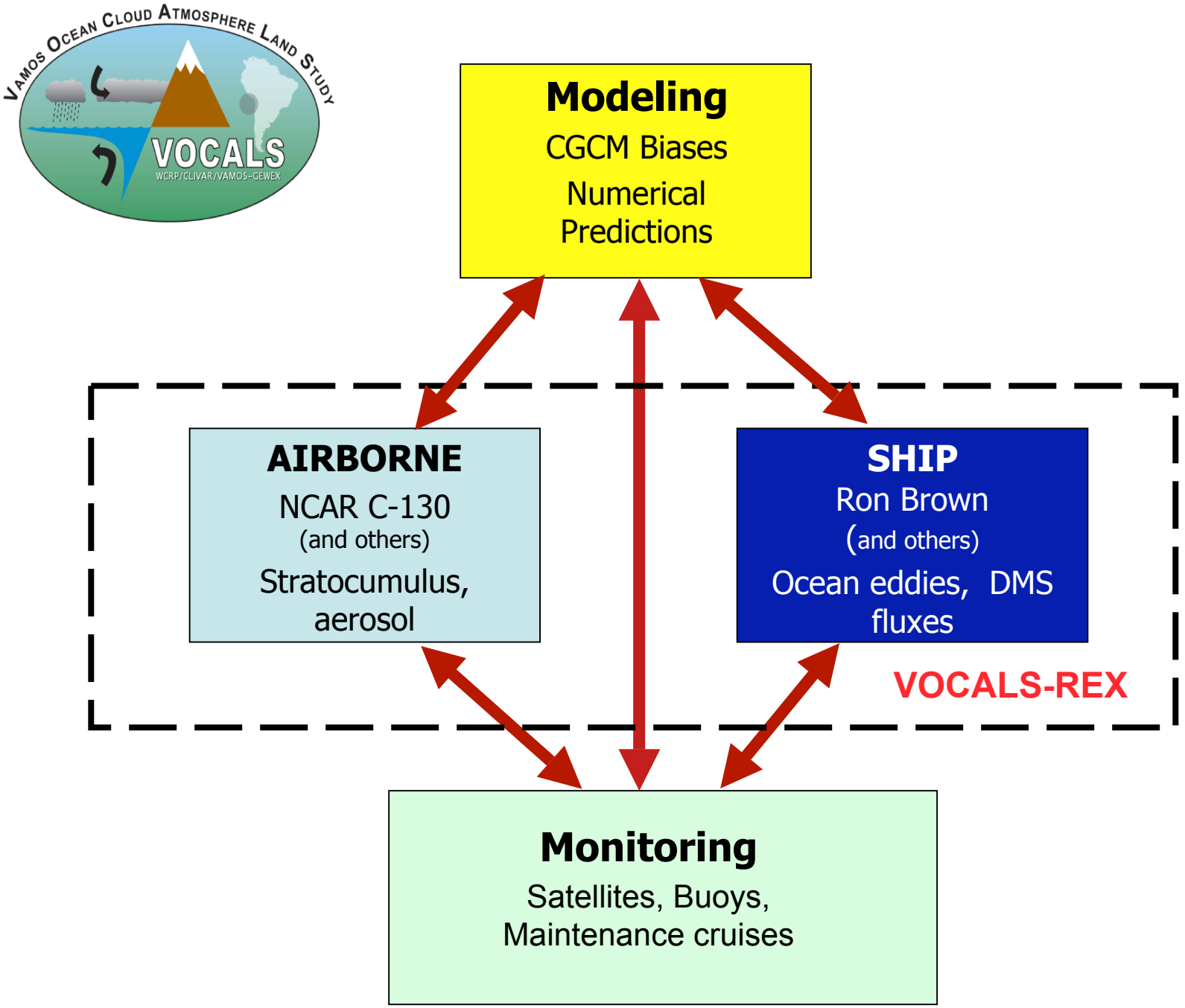
The Southeastern Pacific



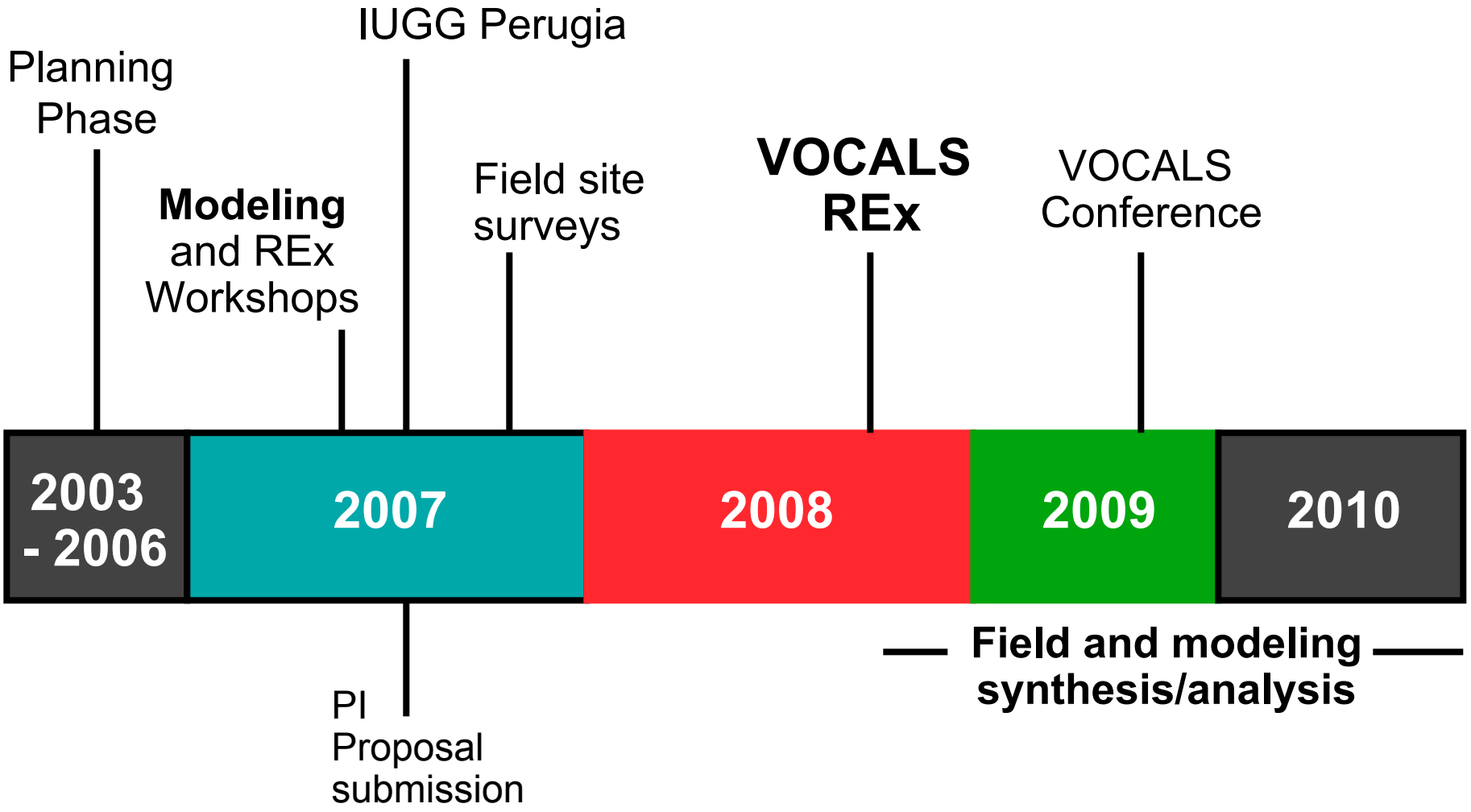
- Cold SSTs, coastal upwelling
- Coastally trapped Kelvin waves and ocean eddies
- Unresolved issues in heat and nutrient budgets
- Important links between clouds and aerosol

- Cloud-topped ABLs, with mesoscale structures
- Influenced by and influential on remote climates (ENSO)
- Poorly simulated by atmosphere-ocean GCMs




VAMOS Ocean Cloud Atmosphere Land Study
VOCALS
WCRP/CLIVAR/VAMOS-GEWEX
Modeling
CGCM Biases
Numerical Predictions
AIRBORNE
NCAR C-130
(and others)
Stratocumulus, aerosol
SHIP
Ron Brown
(and others)
Ocean eddies, DMS fluxes
VOCALS-REX
Monitoring
Satellites, Buoys, Maintenance cruises

VOCALS Timeline



VMW1 - GOALS

1) **Revise** the scientific hypotheses of VOCALS modeling

2) **Identify** the models to be used in VOCALS, discuss their readiness, and review their difficulties with the key processes in the region;

3) **Design** strategies for model validation using current and anticipated VOCALS datasets;

4) **Determine** whether there are any critical gaps in the plan of the VOCALS REx;

5) **Discuss** the development of a Multi-Scale Seasonal Prediction (MUSSIP) system.